

**WHAT IS CLAIMED IS:**

1. A method of arranging objects comprising:  
 setting a class hierarchy, wherein  
 the class hierarchy comprises an upper level class and a lower level class, and  
 the objects are members of at least one of the upper level class and the lower  
 level class;  
 assigning an attribute to the top level class, wherein the attribute describes the objects;  
 and  
 inheriting of the attribute by the lower level class.

2. The method of arranging objects of claim 1, further comprising:  
 assigning an attribute to the lower level class, the attribute describing an object that is  
 a member of the lower level class.

3. The method of arranging objects of claim 1, wherein the attribute comprises a  
 distinctive domain value set.

4. The method of arranging objects of claim 1, wherein the class hierarchy  
 further comprises a class below the lower level class in the class hierarchy, and further  
 comprising:  
 inheriting of the attribute by the class.

5. The method of arranging objects of claim 1, further comprising:  
 expanding the class hierarchy horizontally by adding a class to the lower level class;  
 and  
 inheriting of the attribute by the class.

6. A hierarchical class architecture of objects comprising:  
 an upper level class;  
 a lower level class; and  
 an attribute, wherein  
 the attribute is assigned to the upper level class,

the objects are members of at least one of the upper level class and the lower level class,  
the attribute describes the objects, and  
the lower level class is configured to inherit the attribute.

7. The hierarchical class architecture of claim 6, further comprising:  
an additional attribute, wherein  
the additional attribute is assigned to the lower level class, and  
the attribute describes an object in the lower level class.

8. The hierarchical class architecture of claim 6, wherein the attribute comprises a distinctive domain value set.

9. The hierarchical class architecture of claim 6, further comprising:  
a class, wherein  
the class is below the lower level class in the hierarchical class architecture,  
and  
the class is configured to inherit the attribute.

10. The hierarchical class architecture of claim 6, wherein  
the lower level class is configured to be expanded horizontally by virtue of being  
configured to provide for addition of a class, and  
the class is configured to inherit the attribute.

11. A computer system comprising:  
a processor;  
a computer readable medium coupled to the processor; and  
computer code, encoded in the computer readable medium, configured to cause the processor to:  
set a class hierarchy, wherein  
the class hierarchy comprises an upper level class and a lower level class, and  
the objects are members of at least one of the upper level class and the lower level class;

assign an attribute to the top level class, wherein the attribute describes the objects;  
and  
provide inheritance of the attribute by the lower level class.

12. The computer system of claim 11, wherein the computer code is further configured to cause the processor to:  
assign an attribute to the lower level class, the attribute describing an object that is a member of the lower level class.

13. The computer system of claim 11, wherein the attribute comprises a distinctive domain value set.

14. The computer system of claim 11, wherein the class hierarchy further comprises a class below the lower level class in the class hierarchy, and the computer code is further configured to cause the processor to:  
provide inheritance of the attribute by the class.

15. The computer system of claim 11, wherein the computer code is further configured to cause the processor to:  
expand the class hierarchy horizontally by adding a class to the lower level class; and  
provide inheritance of the attribute by the class.

16. An apparatus for arranging objects comprising:  
means for setting a class hierarchy, wherein  
the class hierarchy comprises an upper level class and a lower level class, and  
the objects are members of at least one of the upper level class and the lower level class;  
means for assigning an attribute to the top level class, wherein the attribute describes the objects; and  
means for inheriting of the attribute by the lower level class.

17. The apparatus of claim 16, further comprising:  
means for assigning an attribute to the lower level class, the attribute describing an object that is a member of the lower level class.

1 18. The apparatus of claim 16, wherein the attribute comprises a distinctive  
2 domain value set.

1 19. The apparatus of claim 16, wherein the class hierarchy further comprises a  
2 class below the lower level class in the class hierarchy, and further comprising:  
3 means for inheriting of the attribute by the class.

1 20. The apparatus of claim 16, further comprising:  
2 means for expanding the class hierarchy horizontally by adding a class to the lower  
3 level class; and  
4 means for inheriting of the attribute by the class.

1 21. A computer program product, encoded in computer readable media,  
2 comprising:  
3 a first set of instructions, executable on a computer system, configured to set a class  
4 hierarchy, wherein  
5 the class hierarchy comprises an upper level class and a lower level class, and  
6 the objects are members of at least one of the upper level class and the lower  
7 level class;  
8 a second set of instructions, executable on the computer system, configured to assign  
9 an attribute to the top level class, wherein the attribute describes the objects;  
10 and  
11 a third set of instructions, executable on the computer system, configured to provide  
12 inheritance of the attribute by the lower level class.

1 22. The computer program product of claim 21, further comprising:  
2 a fourth set of instructions, executable on the computer system, configured to assign  
3 an attribute to the lower level class, the attribute describing an object that is a  
4 member of the lower level class.

1 23. The computer program product of claim 21, wherein the attribute comprises a  
2 distinctive domain value set.

1           24.    The computer program product of claim 21, wherein the class hierarchy  
2 further comprises a class below the lower level class in the class hierarchy, and further  
3 comprising:  
4           a fourth set of instructions, executable on the computer system, configured to provide  
5 inheritance of the attribute by the class.

1           25.    The computer program product of claim 21, further comprising:  
2 a fourth set of instructions, executable on the computer system, configured to expand  
3 the class hierarchy horizontally by adding a class to the lower level class; and  
4 a fifth set of instructions, executable on the computer system, configured to provide  
5 inheritance of the attribute by the class.